



Attainment Demonstration for the 1-Hour Ozone NAAQS

AM-27-00

Agency CAA Task Force Briefing
August 28, 2000



Attainment Demonstration for the 1-Hour Ozone NAAQS

◆ Briefing Outline

- ◆ What is this Plan and Why is it Required?
- ◆ Summary of Draft Plan
- ◆ Comment Summary
- ◆ Summary of Plan for Proposed Adoption
- ◆ Outstanding Issues



Attainment Demonstration for the 1-Hour Ozone NAAQS

- ◆ What is this Plan and Why is it Required?
 - ◆ Continued Violations of the 1-Hour Standard in Wisconsin
 - ◆ Plan Addresses Requirements from the 1990 Clean Air Act Amendments
 - > Originally Due in November 1994
 - > Demonstrates Improvement in Air Quality Sufficient to Attain the 1-Hour Ozone Standard
 - > Achieves Rate-of-Progress Emission Reductions
 - > Establishes VOC RACT Limits for Major Sources
 - > Establishes Required Excess Emission Fee



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◆ Plan Does Not Address

- ◆ 8-Hour Ozone Standard
- ◆ Interstate Transport



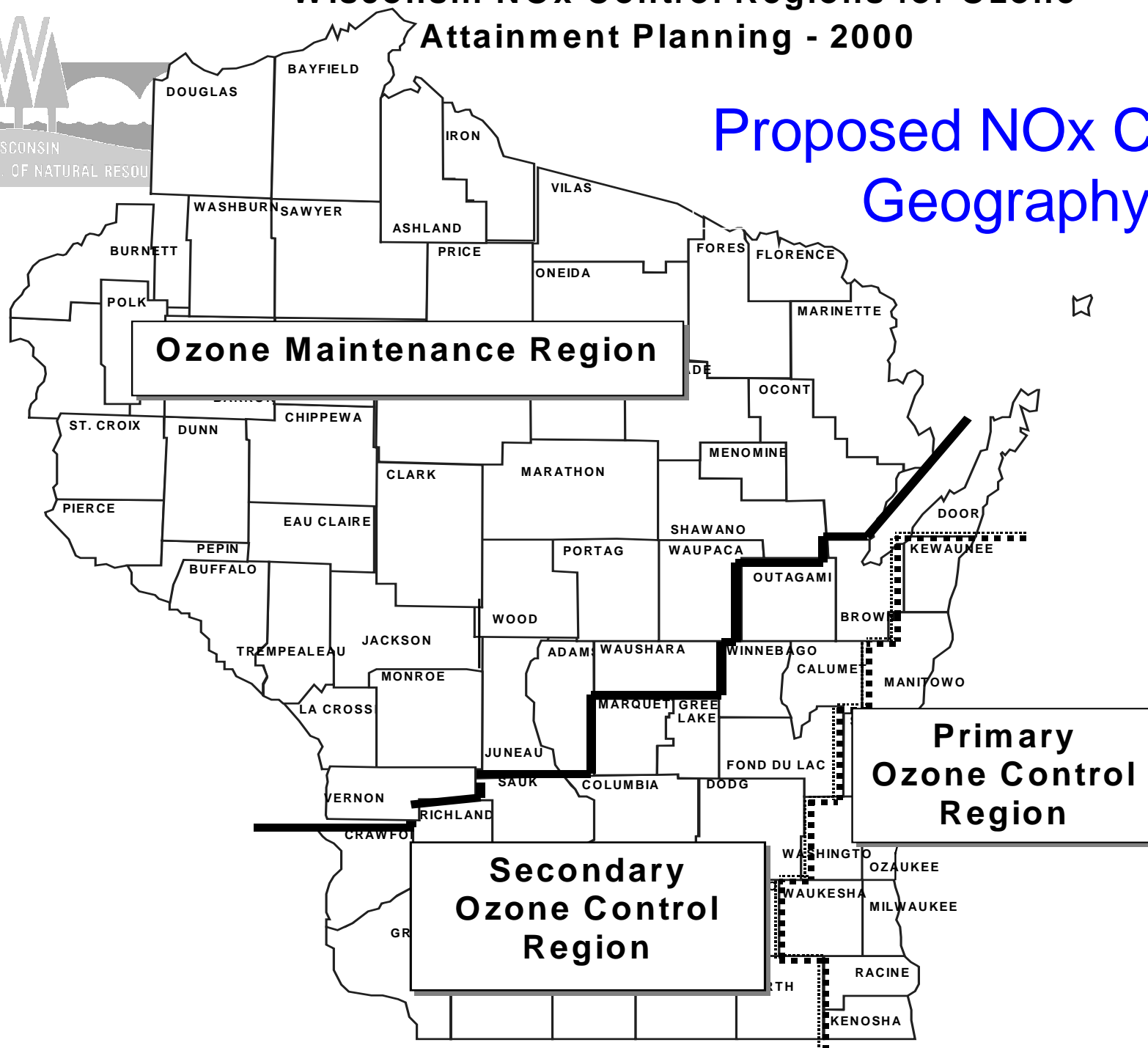
Attainment Demonstration for the 1-Hour Ozone NAAQS

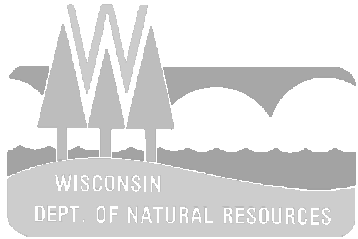
- ◆ Summary of Draft Plan from May
 - ◆ Menu of Options
 - ◆ 3 Control and Maintenance Regions
 - ◆ Statewide Application
 - ◆ Rate-of-Progress in 9 Counties
 - ◆ Excess Emission Fee
 - ◆ VOC RACT
 - ◆ Modeled Demonstration of Attainment

Wisconsin NOx Control Regions for Ozone Attainment Planning - 2000



Proposed NOx Control Geography



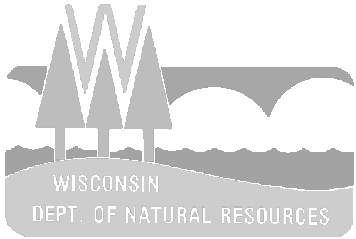


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◆ Draft Plan Summary (cont.)

◆ Primary Control Region Requirements

- > Rate-of-Progress for 9 County Area (VOC+NO_x)
- > Existing Point Source NO_x Control Program
- > New/Modified Point Source NO_x Limitations and Offsets
- > NO_x Pass/Fail for Vehicle I/M Tests
- > VOC RACT (Major Source Categories identified Post-93)



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◆ Draft Plan Summary (cont.)

◆ Secondary Control Region

- > Maintenance of Standard
- > New/Modified Point Source NO_x Limitations and Offsets

◆ Maintenance Region

- > Maintenance of Standard
- > New Point Source NO_x Limitations



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◆ Summary of Significant Comments on Draft Plan

- ◆ Plan goes beyond legal requirements of the Act
- ◆ Question legal requirement for controls in Wisconsin
 - > Statutory Limitation - Ozone control program cannot be more stringent than federal requirements.
 - > Assertion that Rate-of-progress controls are not (or should not) be required if modeled attainment is shown.
 - > Assertion that is no requirement for rate-of-progress in “moderate” nonattainment areas
 - > Modeling shows attainment of the standard without any additional emission reduction in Wisconsin. Hence, there is no need or rationale for any control program in Wisconsin.



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- ◆ Summary of Significant Comments on Draft Plan (Continued)
 - ◆ Maintenance region does not contribute to the ozone problem.
 - ◆ Secondary control region does not contribute to the problem.
 - ◆ Excess emission fee is counterproductive.
 - ◆ Offsets are an unnecessary burden
 - ◆ Remove 3% contingency from rate-of-progress related limitations.
 - ◆ Create a voluntary program to get emission reductions.

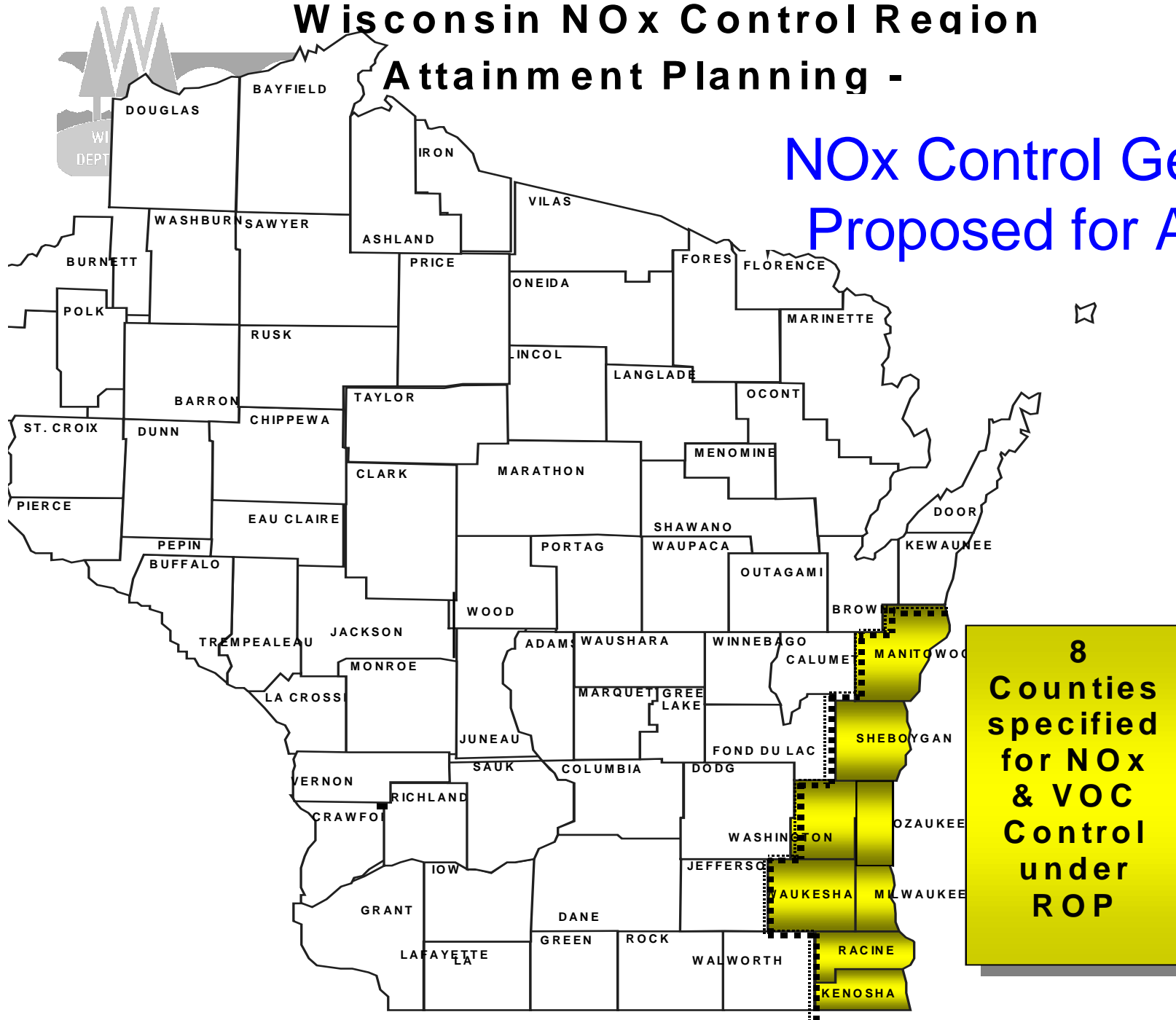


Attainment Demonstration for the 1-Hour Ozone NAAQS

- ◆ Summary of Plan Proposed for Adoption
 - ◆ Rate-of-Progress in 8 Counties
 - ◆ Excess Emission Fee
 - ◆ Modeled Demonstration of Attainment
 - ◆ VOC RACT

Wisconsin NOx Control Region Attainment Planning -

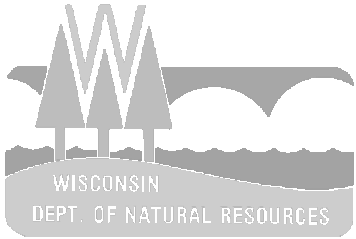
NOx Control Geography Proposed for Adoption





Attainment Demonstration for the 1-Hour Ozone NAAQS

- ◆ Proposed for Adoption - 8 County Rate-of-Progress
 - ◆ Rate-of-Progress to include VOC+NO_x measures
 - ◆ Existing Point Source NO_x Control Program
 - > Electric Generating Units
 - > Large Industrial Sources
 - ◆ New/Modified Point Source NO_x Limitations
 - ◆ NO_x Pass/Fail for Vehicle I/M Tests
 - ◆ VOC RACT (Major Source Categories identified Post-93)



Attainment Demonstration for the 1-Hour Ozone NAAQS

◆ Refinements to Electric Generating System Control Program For Existing Sources

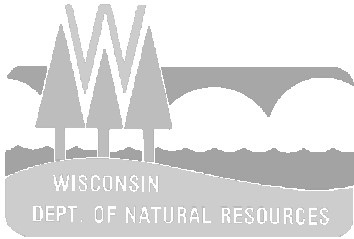
◆ Electric Generating Units System Average Limits

> 2002	0.33 lbs/mmBTU
> 2003	0.31
> 2004	0.30
> 2005	0.29
> 2006	0.29
> 2007	0.28

- subject to ~0.01 lb/mmmbtu final calculation uncertainty in G.S.

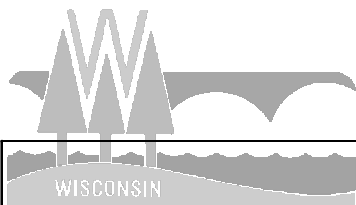
◆ Rates Effective 12/31 Rather Than 5/1

◆ Shift 3% Contingency Back 1 Year



Attainment Demonstration for the 1-Hour Ozone NAAQS

- ◆ Refinements to Existing Source - Minimum Performance Standards for NO_x
 - ◆ Existing Source Emission Limit Performance Standards focused on Industrial & Smaller EGU Entities
 - > Rates Effective 12/31/2002 Rather than 1/1/2002
 - > Eliminated Stoker Boiler Category from Emission Limits
 - > Still Evaluating Other Comments



Proposed SIP NO_x Control Elements

Scope of Proposed Stationary Source Emission Controls

	Offsets for Major NO _x Sources ¹	Minimum Performance Standards for New Facilities	Minimum Performance Standards for Existing Facilities	Rate-of-Progress Plan for 2002 <i>Large Electric Generation Facilities (EGUs)</i>	Rate-of-Progress Plan for 2005 <i>Large Electric Generation Facilities (EGUs)</i>	Rate-of-Progress Plan for 2007 <i>Large Electric Generation Facilities (EGUs)</i>
Primary Ozone Control Region	1 to 1	2001	2002 or 2005 ROP Options for Non-EGU & Small EGU Sources	<u>0.24-0.30</u> lbs/mmbtu EGU System Average Rate	<u>0.23-0.28</u> lbs/mmbtu EGU System Average Rate	<u>0.22-0.27</u> lbs/mmbtu EGU System Average Rate
Secondary Ozone Control Region	2001	2001	<p>No ROP Requirement</p> <p>and</p> <p>Voluntary NO_x Reductions by EGU's</p> <p>and</p> <p>Voluntary Combustion Optimization, Tune-up and NO_x Performance</p> <p>Commitments by Non-EGU's</p>			
Ozone Maintenance Region	No Offsets Required	Permit Target 2001-2006 Requirement in 2007				



Revised NOx Controls - Summary of SIP

Stationary Source NOx Emission Controls to Achieve Rate-of-Progress for the 1-Hour Ozone Standard Attainment Demonstration

Ozone Control Regions in SIP	Offsets for Major NOx Sources	Minimum Performance Standards for New Facilities	Minimum Performance Standards for Existing Facilities	Large Electric Generation Facilities (EGUs)
8 SE WI Counties	No Offset Requirement	2001	<p>Dec 31, 2002</p> <p>Includes Large Unit NOx Emission Limits and Combustion Optimization</p>	<p>Dec 31 of Specified Year:</p> <p>2002 - 0.33 lbs/mmbtu</p> <p>2003 – 0.31 “</p> <p>2004 – 0.30 “</p> <p>2005 – 0.29 “</p> <p>2006 – 0.29 “</p> <p>2007 – 0.28 “</p> <p>EGU System Average Rate (30 day rolling avg)</p> <p>Assumes I/M & Performance Standards in ROP Package</p>
Remainder of State	<p>No ROP Requirement - Voluntary Combustion Optimization, Tune-up and NOx Performance Commitments by Large Sources</p>			



Changed NOx Point Source Summary

Equipment Category	Optimization Requirement		NOx Rate Limits	
	Units	Tons	Units	Tons
Electric Generation Units >500			17	36-45
Other Solid Fuel Boilers	6	1.36	1	0
Gas/Oil Boilers	5	0.06	5	0.85
Furnaces	2	0.82	2	1.27
Kilns	1	0.06		
CTs			8	0.26
IC Engines			3	0.35
Other Process Heaters, Dryers, Ovens, Asphalt Plants				



Attainment Demonstration for the 1-Hour Ozone NAAQS

◆ Outstanding Issues

◆ Potential Areas for Continued Criticism

- > Some commentators will continue to oppose any control program in Wisconsin.
- > Rate-of-Progress in Sheboygan and Manitowoc Counties
 - Continued violations of the 1-hour standard in those counties.
 - 8 County Approach More equitable
 - Allowed in EPA Guidance
 - » (We take advantage of other EPA guidance in the plan.)

◆ Timing for Final Adoption

- > Natural Resource Board action at September 2000 meeting is important